

SECTION 10 14 00

SIGNAGE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including Department of Veterans Affairs, Invitation for Bid, Solicitation, offer and Award, Instructions, Conditions and Other Statements To Bidders, General Provision, General Conditions, and General Requirements apply to this Section.

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Removal of existing wall mounted signs.
 - 2. Panel signs.
- B. Related Sections include the following:
 - 1. Department of Veterans Affairs, Invitation for Bid, Solicitation, offer and Award, Instructions, Conditions and Other Statements To Bidders, General Provision, General Conditions, and General Requirements for use of the building and phasing requirements.

1.03 DEFINITIONS

- A. ADA-ABA Accessibility Guidelines: U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities."

1.04 SUBMITTALS

- A. General: Submit each item in this Article according to the drawings and general provisions of the Contract, including Department of Veterans Affairs, Invitation for Bid, Solicitation, offer and Award, Instructions, Conditions and Other Statements To Bidders, General Provision, General Conditions, and General Requirements Specification Sections.

Project 0830400

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Surgery Renovation and Expansion
Veterans Affairs Medical Center

- B. Product Data: For each type of product indicated.
- C. Shop Drawings: Show fabrication and installation details for signs.
 - 1. Show sign mounting heights, locations of supplementary supports to be provided by others, and accessories.
 - 2. Provide message list, typestyles, graphic elements, including tactile characters and Braille, and layout for each type.
- D. Samples for Selection: Manufacturer's color charts consisting of actual color chips/samples or sections of units showing the full range of colors available for the following:
 - 1. Aluminum.
 - 2. Acrylic sheet.
 - 3. Polycarbonate sheet.
- E. Sample for Verification: Submit two (2) actual panel sign units in size indicated below, as fabricated from materials, finishes and colors selected from selected samples.
 - 1. Sample Panel Sign: Type E-1, size 11-inches x 11-inches.
- F. Sign Schedule: Use same designations indicated on Drawings.
- G. Warranty: Special warranty specified in this Section.

1.05 QUALITY ASSURANCE

- A. Installer Qualifications: Fabricator of products or an employer of workers trained and approved by manufacturer.
- B. Fabricator Qualifications: Shop that employs skilled workers who custom-fabricate products similar to those required for this Project and whose products have a record of successful in-service performance.
- C. Source Limitations for Signs: Obtain each sign type indicated from one source from a single manufacturer.
- D. Regulatory Requirements: Comply with applicable provisions in ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.

1.06 COORDINATION

- A. Coordinate placement of anchorage devices with templates for installing signs.

1.07 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of signs that fail in materials or workmanship within specified warranty period.
1. Failures include, but are not limited to, the following:
 - a. Deterioration of metal and polymer finishes beyond normal weathering.
 - b. Deterioration of sign lamination.
 2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Aluminum Extrusions: ASTM B 221 (ASTM B 221M), alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with at least the strength and durability properties of Alloy 6063-T5.
- B. Steel:
1. Galvanized Steel Sheet: ASTM A 653/A 653M, G90 (Z275) coating, either commercial or forming steel.
- C. Fiberglass Sheet: Molded, seamless, thermosetting, glass-fiber-reinforced polyester panels with a minimum tensile strength of 15,000 psi (103 MPa) when tested according to ASTM D 638 and with a minimum flexural strength of 30,000 psi (207 MPa) when tested according to ASTM D 790.
- D. Acrylic Sheet: ASTM D 4802, Category A-1 (cell-cast sheet), Type UVA (UV absorbing).
- E. Polycarbonate Sheet: Of thickness indicated, manufactured by extrusion process, coated on both surfaces with abrasion-resistant coating:
1. Impact Resistance: 16 ft-lbf/in. (854 J/m) per ASTM D 256, Method A.
 2. Tensile Strength: 9000 lbf/sq. in. (62 MPa) per ASTM D 638.
 3. Flexural Modulus of Elasticity: 340,000 lbf/sq. in. (2345 MPa) per ASTM D 790.
 4. Heat Deflection: 265 deg F (129 deg C) at 264 lbf/sq. in. (1.82 MPa) per ASTM D 648.

5. Abrasion Resistance: 1.5 percent maximum haze increase for 100 revolutions of a Taber abraser with a load of 500 g per ASTM D 1044.

2.02 PANEL SIGNS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 1. Creative Signage Systems, www.creativesignage.com.
 2. Western Specialty Manufacturing Corp., wsmsigns@vcn.com.
- B. Basis-of-Design Product: Subject to compliance with requirements, provide the products indicated on Drawings, as manufacture by Creative Signage Systems, medical facilities Way Finding Directional Signs and Room I.D. Signs, or a comparable product.
- C. Interior Panel Signs: Provide smooth sign panel surfaces constructed to remain flat under installed conditions within a tolerance of plus or minus 1/16 inch (1.5 mm) measured diagonally from corner to corner, complying with the following requirements:
 1. Aluminum Sheet: Minimum 0.050 inch (1.27 mm) thick, or manufactures recommended thickness for sign type indicated.
 2. Laminated, Polycarbonate-Faced Sheet: Minimum 0.060-inch- (1.52-mm-) thick, polycarbonate face sheet laminated to each side of 0.394-inch- (10.0-mm-) thick phenolic backing, or manufactures recommended thickness for sign type indicated.
 3. Acrylic Sheet: Minimum 0.080 inch (2.03 mm) thick, or manufactures recommended thickness for sign type indicated.
 4. PVC Sheet: Minimum 0.060-inch- (1.52-mm-) thick, or manufactures recommended thickness for sign type indicated, extruded, high-impact PVC plastic in color to match face color.
 5. High-Pressure Decorative Laminate: 0.048 inch (1.21 mm) thick.
 6. Laminated Sheet: High-pressure engraved stock with contrasting color face laminated to acrylic core as selected by Resident Engineer from manufacturer's full range.
 7. Laminated, Etched Photopolymer: Raised graphics with Braille 1/32 inch (0.8 mm) above surface with contrasting colors as selected by Resident Engineer from manufacturer's full range and laminated to acrylic back.
 8. Edge Condition: Beveled.
 9. Corner Condition: Square.
 10. Mounting: As indicated.

- a. Wall mounted with two-face tape, or manufacturer's standard anchors for substrates encountered.
- 11. Color: As selected by Resident Engineer from manufacturer's full range.
- 12. Tactile Characters: Characters and Grade 2 Braille raised 1/32 inch (0.8 mm) above surface with contrasting colors.
- D. Laminated Interior Signs: Solid phenolic panel core with graphic image covered with thermosetting resin face layer.
 - 1. Surface Finish: Mat.
 - 2. Edge Condition: Beveled.
 - 3. Corner Condition: [Square.
 - 4. Thickness: 1/4 inch (6 mm).
- E. Panel Sign Frames:
 - 1. Extruded-Aluminum Frames: Mitered with concealed anchors.
 - a. Color: As selected by Resident Engineer from manufacturer's full range.
 - b. Depth: As indicated.
 - c. Profile: Beveled.
 - d. Corner Condition: Square.
 - e. Mounting: As indicated.
 - 1) Wall mounted with concealed anchors or two-face tape.
- F. Changeable Message Inserts: Fabricate signs to allow insertion of changeable messages in the form of slide-in paper inserts printed by Owner between transparent covers.
- G. Tactile and Braille Sign: Manufacturer's standard process for producing text and symbols complying with ADA-ABA Accessibility Guidelines and with ICC/ANSI A117.1. Text shall be accompanied by Grade 2 Braille. Produce precisely formed characters with square-cut edges free from burrs and cut marks; Braille dots with domed or rounded shape.
 - 1. Panel Material: Clear acrylic sheet with opaque color coating, subsurface applied.
 - 2. Raised-Copy Thickness: Not less than 1/32 inch (0.8 mm).

2.03 FABRICATION

- A. General: Provide manufacturer's standard signs of configurations indicated.

1. Mill joints to tight, hairline fit. Form joints exposed to weather to exclude water penetration.
2. Preassemble signs in the shop to greatest extent possible. Disassemble signs only as necessary for shipping and handling limitations. Clearly mark units for reassembly and installation, in location not exposed to view after final assembly.
3. Conceal fasteners if possible; otherwise, locate fasteners where they will be inconspicuous.

2.04 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.05 ALUMINUM FINISHES

- A. Clear Anodic Finish: Manufacturer's standard Class 1 clear anodic coating, 0.018 mm or thicker, over a satin, nonspecular as fabricated mechanical finish, complying with AAMA 611.

2.06 ACRYLIC SHEET FINISHES

- A. Colored Coatings for Acrylic Sheet: For copy and background colors, provide colored coatings, including inks, dyes, and paints, that are recommended by acrylic manufacturers for optimum adherence to acrylic surface and that are UV and water resistant for five years for application intended.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Remove existing wall mounted signs as required for installation of new panel signs as indicated.

1. Where possible install new wall mounted panel signs within approximate location of existing sign to limit damage to adjacent wall finishes.
 2. Remove on the existing wall mounted signs to be replaced with new panel signs.
 3. Existing Life Safety signs will remain in place, do not remove unless specifically note on the Drawings or directed by the Resident Engineer.
- B. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.
- C. Verify that items, including anchor inserts, are sized and located to accommodate signs.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Locate signs and accessories where indicated, using mounting methods of types described and complying with manufacturer's written instructions.
1. Install signs level, plumb, and at heights indicated, with sign surfaces free of distortion and other defects in appearance.
 2. Interior Wall Signs: Install signs on walls adjacent to latch side of door where applicable. Where not indicated or possible, such as double doors, install signs on nearest adjacent walls. Locate to allow approach within 3 inches (75 mm) of sign without encountering protruding objects or standing within swing of door.
 - a. When typical mounting locations conflict with existing wall mounted fixtures, install wall mounted signs as directed by Resident Engineer.
- B. Wall-Mounted Signs: Comply with sign manufacturer's written instructions except where more stringent requirements apply.
1. Two-Face Tape: Mount signs to smooth, nonporous surfaces. Do not use this method for vinyl-covered or rough surfaces.

3.03 CLEANING AND PROTECTION

- A. After installation, clean soiled sign surfaces according to manufacturer's written instructions. Protect signs from damage until acceptance by Owner.

3.04 PANEL SIGN SCHEDULE (Wall Mounted)

- A. DIRECTIONAL SIGNS: As indicated on Drawings.
- B. ROOM I.D. SIGNS: As indicated on Drawings.

END OF SECTION 101400